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Immunize.ST25.txt

SEQUENCE LISTING

<110> Kiselev, Vsevolod I
Petr, Sveshnikov G

<120> METHODS, KITS, AND COMPOSITIONS FOR THE DEVELOPMENT AND USE OF
MONOCLONAL ANTIBODIES SPECIFIC TO ANTIGENS TRADITIONALLY OF LOW
IMMUNOGENICITY

<130> Immunize

<150> RU 2003128660

<151> 2003-09-25

<160> 22

<170> PatentIn version 3.1

<210> 1

<211> 309

<212> DNA

<213> Human papillomavirus type 16

<220>

<221> CDS

<222> (7)..(303)

<223>

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Ile Met His Gly Asp Thr Pro Thr Leu His Glu Tyr Met Leu
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gat ttg caa cca gag aca act gat ctc tac tgt tat gag caa tta aat 96
Asp Leu Gln Pro Glu Thr Thr Asp Leu Tyr Cys Tyr Glu Gln Leu Asn
15 20 25 30

gac agc tca gag gag gag gat gaa ata gat ggt cca gct gga caa gca 144
Asp Ser Ser Glu Glu Glu Asp Glu Ile Asp Gly Pro Ala Gly Gln Ala
35 40 45

gaa ccg gac aga gcc cat tac aat att gta acc ttt tgt tgc aag tgt 192
Glu Pro Asp Arg Ala His Tyr Asn Ile Val Thr Phe Cys Cys Lys Cys
50 55 60

gac tct acg ctt cgg ttg tgc gta caa agc aca cac gta gac att cgt 240
Asp Ser Thr Leu Arg Leu Cys Val Gln Ser Thr His Val Asp Ile Arg
65 70 75

act ttg gaa gac ctg tta atg ggc aca cta gga att gtg tgc ccc atc 288
Thr Leu Glu Asp Leu Leu Met Gly Thr Leu Gly Ile Val Cys Pro Ile
80 85 90

tgt tct cag aaa cca ggaacc 309
Cys Ser Gln Lys Pro
95

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<210> 2
 <211> 99
 <212> PRT
 <213> Human papillomavirus type 16

<400> 2

Ile Met His Gly Asp Thr Pro Thr Leu His Glu Tyr Met Leu Asp Leu
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Gln Pro Glu Thr Thr Asp Leu Tyr Cys Tyr Glu Gln Leu Asn Asp Ser
 20 25 30

Ser Glu Glu Glu Asp Glu Ile Asp Gly Pro Ala Gly Gln Ala Glu Pro
 35 40 45

Asp Arg Ala His Tyr Asn Ile Val Thr Phe Cys Cys Lys Cys Asp Ser
 50 55 60

Thr Leu Arg Leu Cys Val Gln Ser Thr His Val Asp Ile Arg Thr Leu
 65 70 75 80

Glu Asp Leu Leu Met Gly Thr Leu Gly Ile Val Cys Pro Ile Cys Ser
 85 90 95

Gln Lys Pro

<210> 3
 <211> 330
 <212> DNA
 <213> Human papillomavirus type 18

<220>
 <221> CDS
 <222> (7)..(324)
 <223>

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 1 5 10

cat tta gag ccc caa aat gaa att ccg gtt gac ctt cta tgt cac gag 96
 His Leu Glu Pro Gln Asn Glu Ile Pro Val Asp Leu Leu Cys His Glu
 15 20 25 30

caa tta agc gac tca gag gaa gaa aac gat gaa ata gat gga gtt aat 144
 Gln Leu Ser Ser Asp Ser Glu Glu Asn Asp Glu Ile Asp Gly Val Asn
 35 40 45

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cat caa cat tta cca gcc cga cga gct gaa cca caa cgt cac aca atg 192
 His Gln His Leu Pro Ala Arg Arg Ala Glu Pro Gln Arg His Thr Met
 50 55 60

ttg tgt atg tgt tgt aag tgt gaa gcc aga att gag cta gta gta gaa 240
 Leu Cys Met Cys Cys Lys Cys Glu Ala Arg Ile Glu Leu Val Val Glu
 65 70 75

agc tca gca gac gac ctt cga gca ttc cag cag ctg ttt ctg aac acc 288
 Ser Ser Ala Asp Asp Leu Arg Ala Phe Gln Gln Leu Phe Leu Asn Thr
 80 85 90

ctg tcc ttt gtg tgt ccg tgg tgt gca tcc cag cag ggatcc 330
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<210> 4

<211> 106

<212> PRT

<213> Human papillomavirus type 18

<400> 4

Ser Met His Gly Pro Lys Ala Thr Leu Gln Asp Ile Val Leu His Leu
 1 5 10 15

Glu Pro Gln Asn Glu Ile Pro Val Asp Leu Leu Cys His Glu Gln Leu
 20 25 30

Ser Asp Ser Glu Glu Glu Asn Asp Glu Ile Asp Gly Val Asn His Gln
 35 40 45

His Leu Pro Ala Arg Arg Ala Glu Pro Gln Arg His Thr Met Leu Cys
 50 55 60

Met Cys Cys Lys Cys Glu Ala Arg Ile Glu Leu Val Val Glu Ser Ser
 65 70 75 80

Ala Asp Asp Leu Arg Ala Phe Gln Gln Leu Phe Leu Asn Thr Leu Ser
 85 90 95

Phe Val Cys Pro Trp Cys Ala Ser Gln Gln
 100 105

<210> 5

<211> 5321

<212> DNA

<213> Artificial Sequence

<220>

<223> Nucleotide sequence of recombinant vector pQE30-dnaK

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Immunize.ST25.txt

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Immunize.ST25.txt

cctataaaaa taggcgtatc acgaggccct ttcgtctca c 5321

<210> 6
<211> 12
<212> PRT
<213> Bos taurus

<400> 6

Lys Lys Arg Pro Lys Pro Gly Gly Gly Trp Asn Thr
1 5 10

<210> 7
<211> 8
<212> PRT
<213> bos taurus

<400> 7

Gln Pro His Gly Gly Gly Trp Gly
1 5

<210> 8
<211> 13
<212> PRT
<213> bos taurus

<400> 8

Gln Trp Asn Lys Pro Ser Lys Pro Lys Thr Asn Ile Lys
1 5 10

<210> 9
<211> 17
<212> PRT
<213> bos taurus

<400> 9

Ile Thr Gln Tyr Gln Arg Glu Ser Gln Ala Tyr Tyr Gln Arg Gly Ala
1 5 10 15

Ser

<210> 10
<211> 19
<212> DNA
<213> Human papillomavirus type 16

<400> 10
tgacagctca gaggaggag

Immunize.ST25.txt

<210> 11
<211> 19
<212> DNA
<213> Human papillomavirus type 16

<400> 11
gcacaaccga agcgtagag 19

<210> 12
<211> 20
<212> DNA
<213> Human papillomavirus type 18

<400> 12
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<210> 13
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caaaggacag ggtgttcaga 20

<210> 14
<211> 31
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<210> 17
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Immunize.ST25.txt

<213> Human papillomavirus type 16

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<213> Artificial sequence

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<220>

<221> misc_feature

<222> (107)..(108)

<223> HSP 16/HSP18 E7 gene insertion site

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ttaagaagg agatatacat atgcatcacc atcaccatca cgaattcgga tcctaattag 120

ctgaaagctt 130

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<223> Forward primer for pHE716

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<213> Artificial Sequence

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<223> reverse primer for pHE716

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<212> DNA

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<220>

<223> Forward primer for pHE718

Immunize.ST25.txt

<400> 21
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28

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<220>
<223> Reverse primer for pHE718

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28